Growing green? South Korea's approach to the COVID-19 economic recovery

When the dust settled on South Korea's 'unlikeable election', a common way of referring to the country's March 2022 presidential contest between two leading candidates who did not enjoy broad support, Yoon Suk-yeol of the conservative People Power Party emerged ahead by just 0.73 percent of the national vote: the tightest result in the country's democratic history. Yoon's victory signalled the end of a particularly bitter political campaign characterised by tit-for-tat personal insults and a lack of meaningful policy discussion by candidates.

President Yoon's victory also signalled the defeat of the Democratic Party of Korea who, under the leadership of Moon Jae-in, guided the country through the first two years of the COVID-19 pandemic. The cornerstone of the former administration's COVID-19 economic recovery plan was the Korean New Deal, a wide-ranging stimulus package aimed at boosting South Korea's competitiveness in the digital and green technology spheres. The policy has three key pillars: the Digital New Deal, the Green New Deal, and the creation of stronger employment and social safety nets. Coupled with the Moon government's commitment to reach net-zero emissions by 2050, the Green New Deal formed the backbone of South Korea's approach to the global threat posed by climate change.

Early indications suggested that the electoral victory of Yoon's People Power Party would threaten Moon's New Deal and his progressive economic approach to the climate crisis: Yoon stated during the election campaign that '100 percent renewable energy doesn't make any sense', and his transition team targeted funds allocated for the New Deal when considering an early budget restructure in order to meet Yoon's election promises to small business owners. In the months since his election, however, the new President has reaffirmed his commitment to the energy transition and his support for key industries such as hydrogen and critical minerals. Where the two administrations continue to differ is in their stances on nuclear energy, a longstanding point of controversy in Korean politics. While the Moon administration was opposed to the development of a nuclear industry in Korea, Yoon has argued strongly in favour of reviving Korea's nuclear plants and increasing the share of energy derived from nuclear sources in order to meet the country's net zero goal. He

also wants to develop a local reactor industry so that Korea can export nuclear power plants abroad. Concerns still abound, however, largely over Korea's ability to safely store nuclear waste at offsite facilities, as well as the capture of the nuclear industry by a small group of people who aim to monopolise research, regulations and policymaking related to nuclear energy in Korea.

Despite their clear differences, President Moon's Green New Deal and Yoon's pronuclear emission reduction plan should be viewed as competing approaches to a single problem faced by Korea: the need to decarbonise the economy while also securing new paths for economic growth. This policy dilemma is not a new one for Korea and looking at the country's history of energy transition initiatives can help to understand the ways in which such programs can be better implemented around the world.

South Korea: The frontier of green economic growth

Perhaps no other term generates as much excitement among those campaigning for an economically sound way to transition away from fossil fuels as 'green growth'. Writing for *Science*, an academic journal, Tim Jackson and Peter Victor note that the attractiveness of green growth is its promise to 'decouple' the growth of the global economy from Earth's environmental limitations. On a national scale no country, perhaps apart from Germany, has embraced the prospects of green growth to the extent of Korea. Korean foreign policy efforts have for years focused specifically on using green growth as a way of securing future revenue streams for its emerging green industries by encouraging other countries to embrace the clean energy transition.

Lau Blaxekjær, a political scientist at the University of Copenhagen, observes that while many analysts see Korea as a country that has co-opted the language of green growth in order to serve national goals, it was actually Korea *itself* that first proposed the term in international forums and encouraged its widespread adoption as early as 2005. Two academics, Sung-Young Kim and Elizabeth Thurbon, have analysed Korea's embrace and propagation of green growth as a policy paradigm, a shift in Korea which they refer to as 'developmental environmentalism'. The authors highlight three key reasons for Korea's enthusiasm towards green growth: high levels of fossil fuel import dependence, a strong tradition of generating wealth

through industrial development (arising from the rapid post-Korean War industrialisation period), and high levels of bureaucratic centralisation allowing for rapid pivots in policy objectives. Together, these three factors allow for a convergence of environmental and economic goals that is markedly different from other developed states' approach to this 'wicked problem'.

Noticeable in the Moon administration's announcement of Korea's Green New Deal is the fact that Korea's green growth policy was positioned as decidedly nationalist rather than one dictated by political beliefs or party politics. Yoon Jae-kwan, deputy spokesperson for the Blue Housethe official presidential residence under President Moon's administration, described the Green New Deal as 'not a government project. It is all about national unity'; a clear attempt at casting the green growth agenda as apolitical. This is an admirable effort given the widespread political polarisation that often plagues countries' discussions of climate change, most noticeable in the United States where domestic politics have hampered global efforts to combat climate change. Korea is not immune to the phenomenon of climate change opinion division, as evidenced in a 2020 analysis of survey data by the Asan Institute which showed that political alignment was a statistically significant indicator of views on climate change, with supporters of conservative parties being more likely to express greater scepticism about the science of climate change, and less likely to tolerate higher electricity bills during a transition to cleaner energy sources.

President Yoon has shown that whilst his views on nuclear power and its place in Korea's 2030 energy mix differ from his predecessor, he still embraces green growth as a paradigm and its benefits for the Korean nation. This is evident in his election rhetoric that the current climate target of net-zero emissions by 2050 should be achieved as planned, and his inauguration speech calling for 'rapid and sustainable [economic] growth' in Korea. This calibre of debate on climate goals among political figures, wherein leaders hold divergent views on how climate targets should be achieved rather than debate over what targets are necessary, should be the envy of countries such as Australia where climate change has been highly politicised by some media and business interests. The reasons for widespread Korean acceptance of climate change reality run deeper than political debate, however, and also stem from the country's own experience with air pollution and other environmental issues which have been able to unite the country against climate change far more effectively than in the recent history of other OECD countries.

Pollution and other environmental issues in South Korea

Like many other countries, Korea's air quality improved as a result of public health policy restrictions on movement associated with the early stages of the COVID-19 pandemic. This came as a welcome relief for Korea, which in 2021 averaged air pollution readings 3.8 times the World Health Organisation's air quality guideline value. These high figures, particularly in the North-western metropolitan capital of Seoul, have been driven by three factors: the continued use of fossil fuels, 'surrogate' pollution arising from China's fossil fuel use, and microscopic 'fine dust' particles that blow over from sandy areas of China and Mongolia during regional dust storms.

When it was announced, Korea's Green New Deal attracted criticism for failing to address the country's most pressing environmental problems, most notably air pollution. While the deal itself is clear about the targets and goals that the country wants to meet, such as having renewables account for 20 percent of energy generation by 2030 and the provision of 1.13 million electric vehicles supported by a network of 45,000 new vehicle chargers, specifics on how these goals are to be achieved is lacking. For example, the New Deal refers to a loan of 1.9 trillion won (2.1 billion AUD) 'for the green sector including investment to prevent the environmental pollution of businesses'. Exactly how this money would be allocated or tracked is left open to interpretation. The Green New Deal should therefore be seen as much more of an ideological framework than a concrete policy platform. The name alone, invoking US President Franklin D. Roosevelt's renowned 1930s New Deal, underscores the aspirational nature of the program. This desire for an ideological platform upon which to transform the South Korean economy has its roots in the country's post Korean War reconstruction period, which was dominated by its success as one of the Asian 'Tiger' economies that experienced rapid economic growth between the 1960s-1990s. As a manufacturing powerhouse, however, the majority of Korea's economic success has been predicated on the widespread use of fossil fuels to power the country's factories. The strong economic performance during this period and subsequent recovery from the 1997 Asian Financial Crisis has become a source of national pride, and as the need to diversify energy sources away from fossil fuels becomes pressing, the task Korea now faces is how to complete this transition without threatening its economic growth.

This largely explains Korea's use of 'green growth' terminology, which at its core is a discourse designed to circumvent the complex relationship between economic growth and environmental sustainability by allowing countries to continue growing income and wealth in a way that 'decouples' this growth from a rise in carbon emissions. Korea's Green New Deal is therefore as much about securing future economic growth as it is about solving the country's environmental problems. In other words, South Korea is aiming to reinforce 'three Es' of security: energy, environment, and economy.

Lau Blaxekjær's analysis of South Korea, which he refers to as a 'green middle power', notes that as early as 2005 it began promoting green growth overseas through international organisations and collaboration with foreign governments. Domestically, economic policy in these early stages focused on turning Korea into a model for the rest of the world that showed in concrete terms how green growth could be implemented on a national scale. In his 2008 speech on the 60th anniversary of the founding of the Republic of Korea, then-President Lee Myung-bak outlined his vision for the next 60 years, in which he proposed 'Low Carbon, Green Growth as the core of the Republic's new vision'. Following President Lee's speech, Korea's first Five Year Plan for Green Growth was released in 2009, and the Framework Act on Low Carbon Green Growth was enacted in 2010. Both policy programmes make direct reference to green growth as both a national and international strategy that is focused on securing new avenues for economic growth in a low carbon world.

However, these clear attempts to recast the decarbonisation of national economies as an opportunity are seen by many Korean interest groups as a failure by government to address issues more directly affecting everyday Koreans. For example, in a press conference held two months before the government announced its 2021 Green New Deal, several domestic youth organisations including Green Environment Youth Korea pressed the government to provide a more detailed plan for how Korea would reach net zero emissions by 2050, and how workers in carbon-intensive industries would be protected and retrained. The same youth organisations also called on the government to fully commit to phasing out coal both overseas and within Korea. These critiques reflect a clear frustration among Korean activist groups that the government is simply 'greenwashing' their economic policies in order to continue favouring economic growth over environmental sustainability and decarbonisation. Whereas Kim and Thurbon referred to Korea's policy platform as 'developmental environmentalism', these groups would probably prefer

'environmental developmentalism' due to the program's emphasis on economic growth as the key metric of the green growth policy at the expense of true environmentalism.

Research since the policy shift in Korea towards green growth has also cast doubt over the government's ability to deliver on its lofty promise of economic growth without increased carbon emissions. Two academics, Jonas Sonnenschein and Luis Mundaca, conducted an analysis of Korea's CO₂ emissions from 1971-2012, specifically focusing on whether carbon emissions decreased in the 2008-2012 period since the green growth policy platform was announced. The authors find that there was no decrease in emissions over this period, in either an absolute or relative sense. Writing in 2016, the authors conclude that without additional policies such as carbon pricing that are directly targeted at reducing emissions, Korea's CO₂ emissions are likely to increase up to 2026 and beyond. The issue historically for Korea with policy tools such as carbon pricing, as noted by Sung-Young Kim and Elizabeth Thurbon, is that they bring the tension between economic growth and environmental protection directly into the spotlight by framing their relationship as one where compromise is necessary. Korea's green growth strategy has instead aimed to circumvent this debate by focusing on framing green growth as a 'win-win' tool to deliver on economic, environmental, and energy-related goals simultaneously with no visible sacrifice. If Korea is to deliver a truly successful green growth paradigm with the ability to serve as a model for the world, however, the reality of the correlation between economic growth and carbon emissions will need to be addressed.

In academic and media spheres scepticism towards the concept of green growth still abounds, on the scientific basis that it remains to be seen whether the energy expenditure of a given entity can be reduced while also increasing the size of the energy consuming entity. This phenomenon, known in economics as Jevon's Paradox, argues that any improvement in the efficiency of resource use will eventually lead to a net increase in resource use because of the economic growth associated with efficiency gains. Some economists argue that because economic growth reflects the value of goods in an economy, not the overall quantity of goods, this paradox can be avoided, however this argument would likely require a complete retooling of what 'economic growth' means in a low carbon world. Amidst this uncertainty, some have gone as far as to call green growth an oxymoron. Sung-Young Kim, who researches Korea's green transition, tempers this debate by arguing that the concept of green growth should not be abandoned entirely in the 'absence of a realistic alternative to

reconciling the intimately linked goals of economic growth, energy security and ecological sustainability'.

Fuel on the fire: Korean financing of overseas coal projects

In addition to the Green New Deal's lack of detail on Korea's efforts to ease climate change-related environmental issues, activists in Korea have also taken aim at the country's continued overseas financing of coal projects which, at the US President Joe Biden's 2021 climate summit, the Moon government pledged to halt. President Yoon agrees that the phaseout of coal in Korea is inevitable, however he has not yet provided a timeframe within which this will be achieved. Many within Korea see the financing of coal projects as hypocritical, given the government's focus on green growth at home and the visible effects of coal burning on Korea's own air quality. In 2018, two Korean pension funds announced that they would no longer finance coal projects, and Korean activists began taking out overseas advertisements protesting their government's commitment to foreign coal investment. Activists also began collaborating with their counterparts in countries where Korea finances coal projects. In Indonesia, Green Environment Youth Korea worked to broadcast the voices of residents that were adversely affected by the environmental impacts of a Korean coal plant to audiences in Korea. The group then argued that by committing to decarbonisation targets domestically whilst still funding fossil fuel projects overseas, 'Korea's Green New Deal is doing nothing more than a blind trick'.

These developments point to the emergence of bottom-up action from individuals, activists, and companies challenging Korea's green growth and environmental policies. Whereas in the past Korea's development strategies, including the new form of 'developmental environmentalism', have been driven by top down government intervention such as the restructuring of agencies and five year plans to guide economic growth in targeted industries, the country may be witnessing the strengthening of a third force in environmental politics (alongside government and business) that is rooted in the populace's desire to avoid the deleterious effects of climate change.

Can South Korea successfully 'green' growth?

Korea finds itself in an enviable position compared to many other OECD countries: among the population climate change is a widely agreed upon reality, and the need to act in effective and targeted ways is broadly accepted and fought for by citizen activist groups. Like in many rich countries, most notably the United States and Australia, the need to de-politicise climate change debate remains a pressing issue, however in Korea disinformation about climate change and its effects has not stalled political action as much as elsewhere. Even amid a change of government, something that in other countries has precipitated drastic changes in environmental policy, it appears likely that Korea will stay on track to meet its target of net zero emissions by 2050 even though President Yoon plans to reach this goal in a different fashion to his predecessor. Korea's pioneering of green growth sets it apart from the world in leading the mission to reconcile the ever-conflicting goals of economic growth and environmental sustainability, a goal it has been working towards since the early 2000s. Attempts by the Korean government to 'nationalise' the narrative of climate change action by framing it as an opportunity for the nation should be studied closely by those aiming to effect climate policy change in countries marred by political polarisation. While climate change is undoubtedly a global problem, it is crucial that national governments lead the charge in reducing emissions. Korea's approach to decarbonisation may not be perfect and environmental issues must still be addressed, but as the country's rapid industrialisation period has shown, its people are no strangers to economic miracles in the face of steep challenges.

Image: Cheonggyecheon-ro, South Korea, 2017. Credit: Sandi Benedicta/ Unsplash.